UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

EXAMINER
NGUYEN, VAN KIM T

ART UNIT	PAPER NUMBER
2151	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/752,648	CUMMINGS ET AL.
	Examiner	Art Unit	
	Van Kim T. Nguyen	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _____ .
2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,3,4,6-14,16,17,19,20 and 24-34* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1,3,4,6-14,16,17,19,20 and 24-34* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

1.   This Office Action is responsive to communications filed on August 1, 2005.

Claim Rejections - 35 USC § 103

2.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3.   Claim 1, 4, 6-12, 14, 16-17, 20, 24, 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (US 6,269,394), hereinafter Kenner, in view of Rune (US 6,304,913), and further in view of Adrangi et al (US 6,687,846), hereinafter Adrangi.

Regarding claim 1, Kenner discloses a method, comprising:

• receiving a request for data from a requesting system, the request having an address associated with the requesting system (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, this network address being attached to the request in the form of a network ID, which allows the PIM to determine where in the system the requesting computer is located; col. 8: lines 58-66; col. 14: lines 16-29 deals with the regional ID, which is used as an address for matching servers to geographic areas that the requester is in).

• receiving an identifier corresponding to the address from an edge server of a plurality of edge servers, the edge server having the requested data (the PIM interrogates the database of content servers, the requester then receiving an identifier corresponding to the nearest server; col. 12: line 57 – col. 13: line 8).

* selecting the edge server to provide the requested data to the requesting system (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address; col. 11 lines 34-46) wherein the selecting of the edge server further comprises forwarding the address to a database having a predetermined list of addresses corresponding to the plurality of edge servers, and looking up the address corresponding to the edge server in the database (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents, to which the address is forwarded to allow the PIM to find the nearest server to stream the data to the requesting unit; col. 4: line 55 – col. 5: line16; and col. 10: lines 55-65).

* directing the requesting system to the edge server to receive the requested data (the data is sent from the remote storage unit to the requesting unit which . subsequently receives the information; col. 11 lines 41-46).

While Kenner discloses that the system routes the client to receive information from the closest server, it does not directly indicate whether this is in relation to the requesting system. Rune discloses a system for selecting the nearest server from a plurality of alternate servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the system transmits a request to the central server, which selects the address of the server from the list of alternate servers which is closest to the requesting system. Figure 3 also details the system, which shows an alternate route of counting hop counts between a router and an alternate server, the closest server with the smallest number of hop counts being selected (see also col. 5: lines 7-67, for a text analysis of Figure 2; and col. 3: lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a method and Internet system that improves the response times by selecting for use a mirror server locating relatively close to a particular user", (col. 1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to include the choosing of a closest server translates to choosing a server that is nearest to a requesting system as taught by Rune to improve response times of the system by reducing the physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations, except returning a metafile to the requesting system, wherein the metafile includes a path to the selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of returning a metafile including a path to the selected edge server to the requesting system in the combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes to stream a file from a media server.

Regarding claim 4, Kenner discloses the address comprises an IP (Internet Protocol)

address (col. 22: lines 20-68, the top table indicates that a User ID is stored which is used to

identify a user, also the lower table indicates that listing of all IP addresses are stored).

Regarding claim 6, Kenner discloses the request comprises a request for media data (the

invention is directed towards video clip storage and retrieval; col. 7: lines 12-15).

Regarding claim 7, Kenner discloses the request for media data comprises a request for

live media data (the search and retrieval unit, or SRU, can stream video in real time allowing for

live media data; col. 10: lines 9-18).

Regarding claim 8, Kenner discloses the causing the directing of the requesting system to

the edge server comprises:

• connecting the edge server to an origin server receiving the live media data (the PIM

connects a storing server to the origin server to obtain a copy of the data; col. 16: lines 45-51).

• sending the live media data from the origin server to the edge server (a new clip

is stored by the server of origin of the media data, sends the clip to the PIM which sends the clip

to a storing server; col. 16: lines 45-51).

Regarding claim 9, Kenner discloses a method, comprising:

• receiving a request for data from a requesting system, the request having an address

associated with the requesting system (the PIM, or primary index manager, receives a request

from a user workstation which has an associated network address, this network address being
attached to the request in the form of a network ID, which allows the PIM to determine where in
the system the requesting computer is located; col. 8: lines 58-66; col. 14 lines 16-29 deals with
the regional ID, which is used as an address for matching servers to geographic areas that the
requester is in).

• looking up the address using a database, the database having a list of predetermined
addresses corresponding to a plurality of edge servers (after receiving the request, the PIM
selects a server that contains the requested data based on the requesting systems address, col. 11:
lines 34-46).

• if the address exists on the database, receiving an identifier corresponding to the
address from an edge server having the requested data (the PIM interrogates the database of
content servers, the requester then receiving an identifier corresponding to the server; col. 12:
line 57 - col. 13: line 8), and causing the requested data to be sent from the. edge server to the
requesting system (the data is sent from the remote storage unit to the requesting unit which
subsequently receives the information, col. 11: lines 41-46).

While Kenner discloses that the system routes the client to receive information from the
closest server, it does not directly indicate whether this is in relation to the requesting system.
Rune discloses a system for selecting the nearest server from a plurality of alternate servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the
system transmits a request to the central server, which selects the address of the server from the
list of alternate servers which is closest to the requesting system. Figure 3 also details the
system, which shows an alternate route of counting hop counts between a router and an alternate

server, the closest server with the smallest number of hop counts being selected (see also col. 5: lines 7-67, for a text analysis of Figure 2; and col. 3: lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a method and Internet system that improves the response times by selecting for use a mirror server locating relatively close to a particular user" (col. 1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to include the choosing of a closest server translates to choosing a server that is nearest to a requesting system as taught by Rune to improve response times of the system by reducing the physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations, except returning a metafile to the requesting system, wherein the metafile includes a path to the selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of returning a metafile including a path to the selected edge server to the requesting system in the combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes to stream a file from a media server.

Regarding claim 10, Kenner discloses if the address does not exist on the database, causing the requested data to be sent from a deployment server to the requesting system, the deployment server being selected based on a non-address based protocol. (if an unknown user with a non-existent address requests data, a local retrieval unit is created that finds and downloads the data and then transfers the data to the user based on a non-address based protocol, but rather on geographic locality; col. 9: lines 29-42).

Regarding claim 11, Kenner discloses the causing of the requested data to be sent from the selected edge server comprises redirecting the requesting system to the selected edge server (a routing message is created by the index manager, and this is forwarded to the user allowing the requesting system access to the remote server; col. 11: lines 34-40).

Regarding claim 12, Kenner discloses the redirecting the requesting system to the selected edge server comprises sending location information to the requesting system, the location information comprising the address of the selected edge server and the location of the requested data on the selected edge server (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents, to which the address is forwarded to allow the PIM to find the nearest server to stream the data to the requesting unit; col. 4: line 55 - col. 5: line 16; and col. 10: lines 55-65).

Regarding claim 14, Kenner discloses a machine-readable medium having stored thereon data representing sets of instructions, which, when executed by a machine, cause the machine to:

• receive a request for data from a requesting system, the request having an address

associated with the requesting system (the PIM, or primary index manager, receives a request

from a user workstation which has an associated network address, this network address being

attached to the request in the form of a network ID, which allows the PIM to determine where in

the system the requesting computer is located; col. 8: lines 58-66; col. 14: lines 16-29 deals with

the regional ID, which is used as an address for matching servers to geographic areas that the

requester is in),

• receive an identifier corresponding to the address from an edge server of a plurality of

edge servers, the edge server having he requested data (the PIM interrogates the database of

content servers, the requester then receiving an identifier corresponding to the nearest server; col.

12: line 57 - col. 13: line 8).

• select the edge server to provide the requested data to the requesting system (after

receiving the request, the PIM selects a server that contains the requested data based on the

requesting systems address; col. 11: lines 34-46) wherein the sets of instructions which, when

executed by the machine, further cause the machine to forward the address to a database having a

predetermined list of addresses corresponding to the plurality of edge servers, and to look up the

address corresponding to the edge server in the database; (the PIM maintains a database

containing the addresses of the edge servers as well as a listing of the servers contents, to which

the address is forwarded to allow the PIM to find a server to stream the data to the requesting

unit; col. 4: line 55 - col. 5: line16; and col. 10: lines 55-65).

- redirecting the requesting system to edge server to receive the requested data (the data

is sent from the remote storage unit to the requesting unit which subsequently receives the

information; col. 11: lines 41-46).

While Kenner discloses that the system routes the client to receive information from the

closest server, it does not directly indicate whether this is in relation to the requesting system.

Rune discloses a system for selecting the nearest server from a plurality of alternate servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the

system transmits a request to the central server, which selects the address of the server from the

list of alternate servers which is closest to the requesting system. Figure 3 also details the system,

which shows an alternate route of counting hop counts between a router and an alternate server,

the closest server with the smallest number of hop counts being selected (see also col. 5: lines

7-67, for a text analysis of Figure 2; and col. 3: lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a

method and Internet system that improves the response times by selecting for use a mirror server

locating relatively close to a particular user" (col. 1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to

include the choosing of a closest server translates to choosing a server that is nearest to a

requesting system as taught by Rune to improve response times of the system by reducing the

physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations,

except returning a metafile to the requesting system, wherein the metafile includes a path to the

selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of returning a metafile including a path to the selected edge server to the requesting system in the combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes to stream a file from a media server.

Regarding claim 16, Kenner discloses the address comprises an IP (Internet Protocol) address (col. 22: lines 20-68; the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

Regarding claim 17, Kenner discloses an apparatus. comprising:

- a storage medium (the SRU is a storage unit, col. 9: lines 29-31).

- a processor coupled with the storage medium, the processor to:

  o receive a request for data from a requesting system, the request having an address associated with the requesting system (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, this network address being attached to the request in the form of a network ID, which allows the PIM to determine where in the system the requesting computer is located; col. 8: lines

58-66; col. 14 lines 16-29, deals with the regional ID, which is used as an address for matching servers to geographic areas that the requester is in).

o   receives an identifier corresponding to the address from an edge server of a plurality of edge servers, the edge server having the requested data (the PIM interrogates the database of content servers, the requester then receiving an identifier corresponding to the nearest server; col. 12: line 57 - col. 13: line 8).

o   select the edge server to provide the requested data to the requesting system (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address; col. 11: lines 34-46) wherein the selecting of the edge server further includes forwarding the address to a database having a predetermined list of addresses corresponding to the plurality of edge servers, and to look up the address corresponding to the edge server in the database, (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest server to stream the data to the requesting unit; col. 4: line 55 - col. 5: line16; col. 10: lines 55-65).

o   directing the requesting system to the edge server to receive the requested data (the data is sent from the remote storage unit to the requesting unit which subsequently receives the information; col. 11: lines 41-46).

While Kenner discloses that the system routes the client to receive information from the closest server, it does not directly indicate whether this is in relation to the requesting system. Rune discloses a system for selecting the nearest server from a plurality of alternate servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the system transmits a request to the central server, which selects the address of the server from the list of alternate servers which is closest to the requesting system. Figure 3 also details the system, which shows an alternate route of counting hop counts between a router and an alternate server, the closest server with the smallest number of hop counts being selected (see also col. 5 lines: 7-67, for a text analysis of Figure 2; and col. 3 lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a method and Internet system that improves the response times by selecting for use a mirror server locating relatively close to a particular user", (col.1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to include the choosing of a closest server translates to choosing a server that is nearest to a requesting system as taught by Rune to improve response times of the system by reducing the physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations, except returning a metafile to the requesting system, wherein the metafile includes a path to the selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of

returning a metafile including a path to the selected edge server to the requesting system in the

combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes

to stream a file from a media server.

Regarding claim 20, Kenner discloses the address comprises an IP (Internet Protocol)

address (col. 22: lines 20-68, the top table indicates that a User ID is stored which is used to

identify a user, also the lower table indicates that listing of all IP addresses are stored).

Regarding claim 24, Kenner discloses an apparatus, comprising:

- a database having a list of predetermined addresses corresponding to a plurality of

edge servers (the PIM maintains a database containing the addresses of the edge servers as well

as a listing of the servers contents to allow the nearest server to stream the data to the requesting

unit, col. 4 line 55 - col. 5 line16, col. 10 lines 55-65).

- a redirection server coupled to a database, the redirection server to:

    o   receives a request for data from a requesting system, the request having an

address associated with the requesting system (the PIM, or primary index manager,

receives a request from a user workstation which has an associated network address, this

network address being attached to the request in the form of a network ID, which allows

the PIM to determine where in the system the requesting computer is located; col. 8: lines

58-66; col. 14: lines 16-29 deals with the regional ID, which is used as an address for

matching servers to geographic areas that the requester is in).

o   lookup the address on the database (after receiving the request, the PIM

selects a server that contains the requested data based on the requesting systems address;

col. 11: lines 34-46).

o   if the address exists on the database, receive an identifier corresponding to the

address from an edge server having the requested data (the PIM interrogates the database

of content servers, the requester then receiving an identifier corresponding to the server,

col. 12: line 57 - col. 13: line 8), and cause the requested data to be sent from the edge

server to the requesting system (the data is sent from the remote storage unit to the

requesting unit which subsequently receives the information, col.1: lines 41-46).

While Kenner discloses that the system routes the client to receive information from the

closest server, it does not directly indicate whether this is in relation to the requesting system.

Rune discloses a system for selecting the nearest server from a plurality of alternate servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the

system transmits a request to the central server, which selects the address of the server from the

list of alternate servers which is closest to the requesting system. Figure 3 also details the system,

which shows an alternate route of counting hop counts between a router and an alternate server,

the closest server with the smallest number of hop counts being selected (see also col. 5: lines

7-67, for a text analysis of Figure 2; and col. 3: lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a

method and Internet system that improves the response times by selecting for use a mirror server

locating relatively close to a particular user" (col.1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to include the choosing of a closest server translates to choosing a server that is nearest to a requesting system as taught by Rune to improve response times of the system by reducing the physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations, except returning a metafile to the requesting system, wherein the metafile includes a path to the selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of returning a metafile including a path to the selected edge server to the requesting system in the combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes to stream a file from a media server.

Regarding claim 26, Kenner discloses the address comprises an IP (Internet Protocol) address (col. 22: lines 20-68; the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

Regarding claim 27, Kenner discloses a system, comprising:

- requesting system to request data, the request having an address associated with the

requesting system (the PIM, or primary index manager, receives a request from a user

workstation which has an associated network address, this network address being attached to the

request in the form of a network ID, which allows the PIM to determine where in the system the

requesting computer is located; col. 8: lines 58-66; col. 14: lines 16-29 deals with the regional

ID, which is used as an address for matching servers to geographic areas that the requester is in).

- an operations center coupled to the requesting system, the operations center to handle

requests from the requesting system, the operations center having:

  o a site database having a list of predetermined addresses corresponding to a

  plurality of edge servers (the PIM maintains a database containing the addresses of the

  edge servers as well as a listing of the servers contents to allow the nearest server to

  stream the data to the requesting unit; col. 4: line 55 – col. 5: line16; col. 10: lines

  55-65).

  o a redirection module to receive an identifier corresponding to the address from

  an edge server having the requested data (a routing message is created by the index

  manager, and this is forwarded to the user allowing the requesting system access to the

  remote server; col. 11: lines 34-40), to select the edge server to provide the requested data

  to the requesting system, therein selecting of the edge server further comprises

  forwarding the address to the database and to look up the address corresponding to the

  edge server in the database, and to direct the requesting system to receive the requested

  data (the PIM maintains a database containing the addresses of the edge servers as well as

a listing of the servers contents to allow the nearest server to stream the data to the

requesting unit; col. 4: line 55 - col. 5: line16; and col. 10: lines 55-65).

> o   the edge server of the plurality of edge servers to send data to the requesting

system (the data is sent from the remote storage unit to the requesting unit which

subsequently receives the information; col. 11: lines 4-46).

While Kenner discloses that the system routes the client to receive information from the

closest server, it does not directly indicate whether this is in relation to the requesting

system. Rune discloses a system for selecting the nearest server from a plurality of alternate

servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the

system transmits a request to the central server, which selects the address of the server from the

list of alternate servers which is~closest to the requesting system. Figure 3 also details the

system, which shows an alternate route of counting hop counts between a router and an alternate

server, the closest server with the smallest number of hop counts being selected (see also col. 5:

lines 7-67, for a text analysis of Figure 2; and col. 3: lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a

method and Internet system that improves the response times by selecting for use a mirror server

locating relatively close to a particular user" (col. 1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to

include the choosing of a closest server translates to choosing a server that is nearest to a

requesting system as taught by Rune to improve response times of the system by reducing the

physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations, except returning a metafile to the requesting system, wherein the metafile includes a path to the selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of returning a metafile including a path to the selected edge server to the requesting system in the combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes to stream a file from a media server.

Regarding claim 28, Kenner discloses the requesting system comprises a viewer, and the redirection module causing the requested data to be sent from the edge server to the requesting system comprises initiating a dialog session between the viewer and the edge server (in one embodiment, Kenner shows the invention being used to watch videos for a real estate company where the user has a viewer installed in a browser, and a dialog session is also utilized to allow the user to access text data that corresponds to the video; col. 18: line 64 - col. 19: line 43).

Regarding claim 29, Kenner discloses the address comprises an IP (Internet Protocol) address (col. 22: lines 20-68, the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

Regarding claim 30, Kenner discloses a machine-readable medium having stored thereon data representing sets of instructions which, when executed by a machine, cause the machine to:

• receiving a request for data from a requesting system, the request having an address-associated with the requesting system (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, this network address being attached to the request in the form of a network ID, which allows the PIM to determine where in the system the requesting computer is located; col. 8: lines 58-66; col. 14: lines 16-29 deals with the regional ID, which is used as an address for matching servers to geographic areas that the requester is in).

• looking up the address using a database, the database having a list of predetermined addresses corresponding to a plurality of edge servers (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col. 11: lines 34-46).

• if the address exists on the database, receiving an identifier corresponding to the address from an edge server having the requested data, and causing the requested data to be sent from the edge server to the requesting system (the PIM interrogates the database of content servers, the requester then receiving an identifier corresponding to the nearest server; col. 12: line 57 - col. 13: line 8), and causing the requested data to be sent from the edge server to the

requesting system (the data is sent from the remote storage unit to the requesting unit which subsequently receives the information, col. 11: lines 41-46).

While Kenner discloses that the system routes the client to receive information from the closest server, it does not directly indicate whether this is in relation to the requesting system. Rune discloses a system for selecting the nearest server from a plurality of alternate servers.

As seen in Figure 2, Rune assigns name and addresses to alternate servers. Then the system transmits a request to the central server, which selects the address of the server from the list of alternate servers which is closest to the requesting system. Figure 3 also details the system, which shows an alternate route of counting hop counts between a router and an alternate server, the closest server with the smallest number of hop counts being selected (see also col. 5: lines 7-67, for a text analysis of Figure 2; and col. 3: lines 1-27, for a text analysis of Figure 3).

Rune teaches it would be useful to select the closest alternate server as it provides "a method and Internet system that improves the response times by selecting for use a mirror server locating relatively close to a particular user" (col. 1: lines 42-46).

Thus it would have been obvious to one of ordinary skill in the art to modify Kenner to include the choosing of a closest server translates to choosing a server that is nearest to a requesting system as taught by Rune to improve response times of the system by reducing the physical distances between the transmitter and receiver of information.

The combination of Kenner and Rune teaches substantially all the claimed limitations, except returning a metafile to the requesting system, wherein the metafile includes a path to the selected edge server.

As shown in Figure 13, Adrangi discloses returning a metafile to the requesting system (1310), wherein the metafile includes a path to the selected edge server (507); (col. 10: line 35 – col. 11: line 20).

The combination of Kenner and Rune and Adrangi teach analogous arts, relating to requesting and transferring file from an edge server. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Adrangi's method of returning a metafile including a path to the selected edge server to the requesting system in the combination of Kenner and Rune's system, motivated by the desire to minimize the time it takes to stream a file from a media server.

Regarding claim 31, Kenner discloses the sets of instructions when executed by the machine, further cause the machine to if the address does not exist on the database, cause the requested data to be sent from a deployment server to the requesting system, the deployment server being selected based on a non-address based protocol (if an unknown user with a non-existent address requests data, a local retrieval unit is created that finds and downloads the data and then transfers the data to the user based on a non-address based protocol, but rather on geographic locality; col. 9: lines 29-42).

Regarding claim 32, Kenner discloses the causing of the requested data to be sent from the selected edge server comprises redirecting the requesting system to the selected edge server (a routing message is created by the index manager, and this is forwarded to the user allowing the requesting system access to the remote server; col. 11: lines 34-40).

Regarding claim 33, Kenner discloses the redirecting the requesting system to the

selected edge server comprises sending location information to the requesting system, the

location information comprising the address of the selected edge server and the location of the

requested data on the selected edge server (the PIM maintains a database containing the

addresses of the edge servers as well as a listing of the servers contents, to which the address is

forwarded to allow the PIM to find the nearest server to stream the data to the requesting unit;

col. 4: line 55 - col. 5: line 16; and col. 10: lines 55-65).

4.   Claims 3, 13, 19, 25 and 34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kenner in view of Rune, further in view of Adrangi, and further in view of

Alkhatib (US 6,119,171).

The combination of Kenner, Rune, and Adrangi discloses substantially all the claimed

limitations, except using a predetermined list of CIDR (Classless Inter-Domain Routing) blocks

corresponding to the address of an edge server.

Alkhatib discloses a system of domain name routing where the feature of utilizing CIDR

blocks is discussed. Alkhatib teaches using CIDR blocks as a solution to the depleting IP address

problem currently facing networks. Utilizing CIDR blocks allocates a series of Class C network

addresses in the place of a Class B network to slow the consumption of Class B network

addresses (col. 2: lines 1-12).

Thus it would have been obvious to one of ordinary skill in the art at the time of

invention to modify the combination of Kenner, Rune, and Adrangi, to include utilizing CIDR

blocks as taught by Alkhatib as a solution to the depleting IP address problem currently facing

networks.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073.

The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung, can be reached on 571-272-3939. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Van Kim T. Nguyen
> Examiner
> Art Unit 2151

vkn

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER